GROWING AREA EF

Blue Hill Bay

Annual Report
2022

Final
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Field Observations of Pollution Sources

During routine sampling on May 9th, 2022, an outhouse was found near station EF11.00. Steps were taken to contact landowners and have the outhouse removed. On November 18th, 2022, a drive through survey of growing area EF was completed by DMR staff and no new problems were discovered, and the outhouse had been removed.

Review of Water Quality Results

Table 1: Geomean and P90 Scores, Growing Area EF Approved, Restricted, Prohibited Areas, 2022. Geomeans and P90s not meeting current classifications are highlighted in red.

Station	Class	Count	GM	SDV	MAX	P90	Min Date
EF001.80	A	30	3.9	0.47	58	15.8	2/5/2019
EF001.90	R	30	5.1	0.52	100	23.9	3/6/2018
EF002.00	R	30	9.1	0.77	860	90.2	7/24/2018
EF002.50	A	30	2.4	0.3	60	6	4/17/2018
EF004.00	R	30	3.7	0.64	600	24.9	4/17/2018
EF004.10	A	30	2.8	0.42	180	10	1/31/2017
EF005.00	A	30	3.2	0.54	160	16	4/17/2018
EF006.00	A	30	2.8	0.52	400	13.7	4/17/2018
EF008.00	P	30	3.2	0.45	120	12.3	4/17/2018
EF009.30	A	30	3.2	0.42	42	11.3	4/17/2018
EF010.00	A	30	3.6	0.4	36	11.8	4/16/2019
EF010.50	A	30	4.2	0.5	130	18.7	3/19/2019
EF011.00	A	30	4.9	0.44	40	18.5	6/4/2019
EF011.30	A	30	4	0.48	84	16.8	5/1/2018
EF013.00	A	30	2.1	0.25	40	4.6	4/17/2018
EF014.00	A	30	3.4	0.43	52	12.5	4/17/2018
EF020.00	A	30	2.3	0.31	48	6	5/30/2018
EF020.50	A	30	1.9	0	2	1.9	7/24/2018
EF022.00	P	30	4.4	0.54	140	22.1	10/2/2019
EF022.91	P	30	3.8	0.52	112	17.8	5/30/2018
EF023.00	P	30	4.6	0.5	50	20.6	5/30/2018
EF024.00	A	30	3	0.33	22	8	5/30/2018
EF025.00	A	30	3.2	0.35	42	9	5/30/2018
EF026.00	A	30	2.4	0.22	13	4.6	5/30/2018

CAMP Reviews, Inspection Reports, and Performance Standards

A portion of Blue Hill Harbor (Blue Hill) is classified as Conditionally Approved because of proximity to a WWTP and is unlawful to dig, take or possess any clams, quahogs, oysters or mussels from the shores, flats and waters of the area following a malfunction/CSO event from the Blue Hill Wastewater Treatment Plant. This Conditionally Approved area is monitored by water quality stations, EF015.00, EF016.50 and EF019.00. All stations met approved standards during open status (Table 2), therefore the management plan remains in compliance.

Table 2: Blue Hill Harbor WWTP Conditional Area; Geometric Mean, Count and P90 (OPEN status).

Station	Class	Count	GM	SDV	MAX	P90	Min_Date
EF015.00	CA	30	3.2	0.47	134	13.1	7/6/2020
EF016.50	CA	30	3.6	0.47	60	14.8	7/6/2020
EF019.00	CA	30	3.2	0.52	220	14.9	7/6/2020

Twol areas of Blue Hill Harbor (Blue Hill) are classified as Conditionally Restricted because of proximity to a WWTP and it is unlawful to dig, take or possess any clams, quahogs, oysters, or mussels from the shores, flats and waters of the area without a special MDMR permit and following any malfunction/CSO event at the Blue Hill Wastewater Treatment Plant. These Conditionally Restricted areas are monitored by water quality stations EF017.80 and EF018.00. All stations met approved standards during open status (Table 3), therefore the management plan remains in compliance.

Table 3: Blue Hill Harbor WWTP Conditional Area; Geometric Mean, Count and P90 (OPEN status).

Station	Class	Count	GM	SDV	MAX	P90	Min_Date
EF017.80	CR	30	2.7	0.37	66	8.4	7/6/2020
EF018.00	CR	30	4.9	0.69	1700	38.7	7/6/2020

Permitted Discharges

There is one waste water treatment plant in growing area EF. The current listings of National Pollution Discharge Elimination System (NPDES) and State Licensed Discharge sites for growing area EF are shown in Table 4. The pollution area for each of these sites is also shown. There are two overboard discharges (OBDs) in growing area EF. There were no OBDs removed during 2022 in Growing Area EF.

Table 4: Federal and State Licensed Discharges

Closure Area	Permit ID	Type	Facility	Waterbody
P2	ME0101231	POTW-Major	Blue Hill WWTF	Blue Hill Harbor
P1	6864	OBD	Residential	McHeard Cove
P3	7086	OBD	Residential	Blue Hill Bay

Brief Report of Findings

Emergency Closures: The reports summarizing emergency closures such as flood and biotoxin closures for the entire state are in the DMR central files.

Reclassifications: A portion of Blue Hill Salt Pond was reclassified from Conditionally Approved to Approved based on water quality meeting approved standards year-round. Based on 2022 year end data, water quality classification changes will be considered for areas in Herrick Bay and Flye Point.

Summary

All approved, conditionally approved, and conditionally restricted stations met their NSSP classification standard for 2022. EF 14.2 was an Investigative station in 2022. There were no new activations, deactivations, investigative sites added.

Table 5: Count Table for all Active Stations in Growing Area EF, 2022

Station	Class	Closed	Open	Investigative	Total	Samples Required	Comments
EF001.80	A		6		6	6	
EF001.90	R		6		6	6	
EF002.00	R		6		6	6	
EF002.50	A		7		7	6	
EF004.00	R		7		7	6	
EF004.10	A		7		7	6	
EF005.00	A		7		7	6	
EF006.00	A		7		7	6	
EF008.00	P	7			7	6	
EF009.30	A		7		7	6	
EF010.00	A		8		8	6	
EF010.50	A		8		8	6	
EF011.00	A		8		8	6	
EF011.30	A		7		7	6	
EF013.00	A	4	7		11	6	flood
EF014.00	A		7		7	6	
EF014.20	X			12	12	6	
EF015.00	CA		12		12	12	
EF016.50	CA		12		12	12	
EF017.80	CR		12		12	12	
EF018.00	CR		12		12	12	
EF019.00	CA		12		12	12	
EF020.00	A		7		7	6	

Station	Class	Closed	Open	Investigative	Total	Samples Required	Comments
EF020.50	A		7		7	6	
EF022.00	P	7			7	6	
EF022.91	P	7			7	6	
EF023.00	P	7			7	6	
EF024.00	A		7		7	6	
EF025.00	A		7		7	6	
EF026.00	A		7		7	6	

Appendix A.

Key to Water Quality Table Headers

Station = water quality monitoring station

Class = classification assigned to the station; Prohibited (P), Restricted (R), Conditionally Restricted (CR), Conditionally Approved (CA) and Approved (A). An unclassified or investigative station is (X).

Count = the number of samples evaluated for classification, must be a minimum of 30.

GM = means the antilog (base 10) of the arithmetic mean of the sample result logarithm (base 10).

SDV = standard deviation

Max = maximum score of the 30 data points in the count column

P90 = 90th percentile, Approved standard is 31, Restricted standard is 163

Min_Date = oldest date sampled included in the calculations.

X= investigative station

Reference Material

An interactive map is available on the DMR website for reference. This map includes water quality station locations, end of year P90 scores, current classifications, and other information. https://www.maine.gov/dmr/shellfish-sanitation-management/maps/index.html